## **Product Specification Sheet**

**Product Name:** BIBR-1048 (Dabigatran etexilate)

Catalog Number: C2104

**Technical information:** 

Chemical Formula: C<sub>34</sub>H<sub>41</sub>N<sub>7</sub>O<sub>5</sub>

CAS #: 211915-06-9

Molecular Weight: 627.73

Purity: > 98%

Appearance: white solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: (E)-ethyl 3-(2-((4-(N'-(hexyloxycarbonyl)carbamimidoyl)phenylamino)methyl)-1-methyl-N-(pyridin-

2-yl)-1H-benzo[d]imidazole-5-carboxamido)propanoate

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months

under proper storage condition.

Handling: • To make 10 mM stock solution, add 0.159mL of DMSO for each mg of BIBR-1048 (Dabigatran

etexilate).

• For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum

sample recovery.

**Biological Activity:** BIBR-1048 (Dabigatran etexilate) is an orally-active, non-covalent, reversible inhibitor of thrombin.

It is the double ester prodrug of BIBR-953, which has an IC50 against thrombin and trypsin at 9.3, and 50.3 nM, respectively. (1) In addition to inhibiting free thrombin, BIBR-1048 also inhibits thrombin generation, fibrin-bound thrombin, and thrombin-induced platelet aggregation. (2)

Reference: 1. Abbenante et al., Protease Inhibitors in the Clinic, Med. Chem. 2005, 1, 71-104. Pubmed ID: 16789888

2. Jackson, J.M., Drug Review - Dabigatran for stroke prevention in atrial fibrillation, Drugs in Context, 2011, 6, 11-28.

To reorder: <a href="http://www.cellagentech.com/BIBR-1048-Dabigatran-etexilate/">http://www.cellagentech.com/BIBR-1048-Dabigatran-etexilate/</a>

For Technical Support: technical@cellagentech.com

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